

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/751,139	01/05/2004	Gerard Levasseur	03-067-GL	1742	
7.	590 04/19/2005		EXAMINER		
	Lambert & Associates			LIE, ANGELA M	
92 State Street Boston, MA 02109-2004			ART UNIT	PAPER NUMBER	
,			2821		
			DATE MAILED: 04/19/2009	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office A 41 - 11 O	10/751,139	LEVASSEUR, GERARD				
Office Action Summary	Examiner	Art Unit				
	Angela M. Lie	2821				
The MAILING DATE of this communication Period for Reply	n appears on the cover sheet v	vith the correspondence address -				
A SHORTENED STATUTORY PERIOD FOR RI THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication if the period for reply specified above is less than thirty (30) days, if NO period for reply is specified above, the maximum statutory properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply will, by some properties of the period for reply will, by some properties of the period for reply will, by some properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply within the set or extended period for reply will, by some properties of the period for reply within the set or extended period for reply will be period for reply within the set or extended period for reply will be period for reply within the set or extended period for reply will be period for reply will be period for reply and the period for reply will be period for reply and the period for reply will be provided by the provided for the provided for reply will be provided for the provided for	ON. FR 1.136(a). In no event, however, may a n. a reply within the statutory minimum of the eriod will apply and will expire SIX (6) MO statute, cause the application to become A	reply be timely filed  rty (30) days will be considered timely.  NTHS from the mailing date of this communication.  BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on (	05 January 2004.					
2a) This action is <b>FINAL</b> . 2b) This action is non-final.						
3) Since this application is in condition for all	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice und	der <i>Ex parte Quayle</i> , 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims	•					
4) ☐ Claim(s) 1-18 is/are pending in the applica 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-17 is/are rejected. 7) ☐ Claim(s) 18 is/are objected to. 8) ☐ Claim(s) are subject to restriction a	ndrawn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Exam 10)☒ The drawing(s) filed on 05 January 2004 is Applicant may not request that any objection to Replacement drawing sheet(s) including the co	/are: a)⊠ accepted or b)□ o the drawing(s) be held in abeya orrection is required if the drawing	nnce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of:  1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	nents have been received. nents have been received in a priority documents have bee ureau (PCT Rule 17.2(a)).	Application No n received in this National Stage				
Attachment(s)						
Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application (PTO-152)				
Patent and Trademark Office		<del></del>				

Application/Control Number: 10/751,139

Art Unit: 2821

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Coffield (US 5961092).

As to claim 1 and 2, Coffield discloses a base support member (Figure 2 element 16), and at least one vertical support member (Figure 2 element 6) extending upwardly from the base support member (as seen in Figure 1 and 2 i.e. part 6 is extendable).

Note: The words trailer hitch are not given patentable weight because they are part of preamble and the mechanism comprising parts listed in claim 1 or 2, does not necessarily have to be a trailer hitch.

As to claim 3 and 4, Coffield discloses all the limitations listed in claim 2 and further he discloses a satellite dish antenna support system comprising: a plurality of vertical support members extending upwardly (Figure 4 elements 6 and 10) from the base support member (Figure 1 element 16), the vertical support members capable of engaging (Figure 4 element 10, since claim 2 mentions at least one vertical support member, a plurality of vertical support members is in the scope of phrase "at least one") a satellite dish antenna (Figure 1 element 12).

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5 and 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coffield (US 5961092) in the view of Wilson (US 2003/0164437).

As to claim 5, Coffield discloses all the limitations presented in claim 2, he also teaches the satellite dish antenna support system wherein the base support comprises a support end (Figure 2 the bottom part of element 6) and a hitch end (Figure 2 the bottom part of element 4). Coffield does not teach that the hitch end has an outer perimeter slightly smaller than, and capable of being inserted into, a trailer hitch receiver. Wilson teaches an attachment placed on the vehicle comprising a hitch end (Figure on the front page, the bottom part of element 10), which has a an outer perimeter slightly smaller than (as shown in the figure on the front page), and capable of being inserted into, a trailer hitch receiver (Figure on the front page, element 18). It would have been obvious to one of the ordinary skill in the art during the time when the invention was made to incorporate Wilson's teaching into Coffield's invention to create a mounting system for the satellite antenna in a trailer hitch, because using hitch space (i.e. area on which hitch is placed) eliminates a problem of looking for a good place to mount an antenna on. In addition if there is trailer or a truck, mounting dish antenna in the back with a hitch might be the only option in some cases, resulted in lack of space

on which such a mechanism could be attached. Further in respect to the hitch end being smaller than a trailer hitch receiver, this arrangement is more stable than combination in which a trailer hitch would be smaller than hitch end, this is a very important aspect in this design because a satellite antenna has to be in stable position (to receive a signal) in case a wind blows or in case of other disturbing weather conditions.

As to claim 9, Coffield discloses a satellite dish antenna support system comprising: a base support member (Figure 1 element 16), a pair of vertical support members (Figure 1 elements 4 and 6) attached to the base support member (16), a first of the pair of vertical support members (Figure 1 element 4) telescopically receiving a second of the pair of vertical support members (Figure 1 element 6), the second of the pair of vertical support members (Figure 1 element 6), the second of the pair of vertical support members engaging a satellite dish antenna (as shown in figure 1, elements 4 and 6), however his means for locking the pair of vertical support members in positions are different than the one proposed in the application. Wilson however teaches identical means for locking telescoping members in certain position (as shown in figure 1).

As to claim 10, Coffield and Wilson teach all the limitations presented in claim 9, Wilson also teaches locking means being capable of selectively locking the first and the second vertical support members (Figure 1, elements 10 and 11) together in a plurality of relative positions to enable the length of the support bar to be selectively varied (as shown in figure 1, claim 1, paragraph 3).

Application/Control Number: 10/751,139

Art Unit: 2821

As to claim 11, Coffield and Wilson teach all the limitations presented in claim 9, Wilson also teaches locking means including at least one outer area (Figure 1 element 13) in the second of said pair of vertical support members (Figure 1 element 11).

As to claim 12, Coffield and Wilson teach all the limitations presented in claim 11, Wilson also teaches locking means further comprising a removably attachable locking pin member (Figure 1 element 19, column 2 last line of paragraph 16) with a diameter substantially similar to the diameter of the outer receiving area (as seen from figure 1, elements 13 and 19).

As to claim 13, Coffield and Wilson teach all the limitations presented in claim 11, Wilson also teaches locking means further comprising a plurality of inner receiving areas (Figure 1 openings in element 10) in the first of the vertical support members (Figure 1 element 10), the plurality of inner receiving areas being selectively alignable with the outer receiving area (as shown in figure 1).

As to claim 14, Coffield and Wilson teach all the limitations presented in claim 13, Wilson also teaches locking means being constructed to be received in aligned the inner and the outer receiving areas for locking the pair of vertical support members (column 2 paragraph 17).

As to claim 15, Coffield and Wilson teach all the limitations presented in claim 13, Wilson also teaches the plurality of inner receiving areas further comprising indentations (Figure 1 openings in the element 10).

As to claim 16, Coffield and Wilson teach all the limitations presented in claim 13, Wilson also teaches inner receiving areas (Figure 1 openings in element 10) being

spaced a substantially equal distance from one another (as shown in figure 1) along the length of the first of the vertical support members (Figure 1 element 10).

As to claim 17, Coffield and Wilson teach all the limitations presented in claim 13, Wilson also teaches inner receiving area forming at least one substantially straight line along the length of the first of the pair of vertical support members (as shown in figure 1).

Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coffield (US 5961092) in the view of Wilson and further in the view of Brown (US 2003/0205599).

As to claim 6, Coffield discloses all the limitations provided in claim 2,he also teaches a vertical support having first and second ends (Figure 1 bottom part of element 4 and top part of element 6), the vertical support member extending upwardly from the base support (Figure 1 element 16) and the second end capable of receiving a satellite dish antenna (Figure 1 element 12). Coffield does not teach a square, tubular base support capable of being received in standard trailer hitch receiver, the base support having a cavity on one side of suitable diameter to allow a locking pin to be inserted, a length of angle iron approximately eight inches, having a front and lateral sides substantially flush with the case support, the first end bolted to the angle iron.

Wilson teaches a tubular base support extending upwardly (Figure on the front page, element 18) and the base (18) being welded to the hitch tube (column 2, paragraph 18).

Brown teaches a square, tubular base support capable of being received by a standard trailer hitch receiver (Figure 5, element 126), the base support having a cavity on one side of suitable diameter to allow a locking pin to be inserted (Figure 4, elements 138 and 126); a length of angle iron being approximately 8 inches (page 4, second column, paragraph 59 last line and Figure 4, since element is 1.5 inch square, just by looking at the proportions between element 102 and 126, it can be seen that element is indeed approximately 8 inches long, i.e. measurement can be also done using scaling properties), angle iron having a front and a lateral side (as shown in Figure 5 element 126) and element end bolted to the angle iron (as shown in figure 5, elements 126 and 102 and figure 4 element 132 and 126).

It would have been obvious to one of the ordinary skill in the art during the time when the invention was made to incorporate Wilson's base welded to the hitch tube (the reasons for putting a support system at the back of the vehicle with the hitch, are explained in the justification for rejection of claim 5), where the base (angle iron) extends upwardly into the mounting system taught by Coffield, because once the mounting system is placed in the back of the vehicle with the hitch it has to be well mounted to assure that the device for instance dish antenna will be stable, and welding is one of the strongest methods for joining metal elements, furthermore, Coffield shows in his invention that the support base should point upwards (Figure 1 element 16), therefore base support taught by Wilson should also extend upwardly, in order to extend an dish antenna in the vertical direction. Further, it would have been obvious to one of the ordinary skill in the art during the time when the invention was made to incorporate

Brown's square, tubular base support (having a front and a lateral side), which has a cavity (Figure 4 element 138) on one side of suitable diameter to allow a locking pin to be inserted, and where the end of the bar is bolted to the angle iron (Figure 5 element 126 and Figure 4 element 132) into the mounting dish antenna support taught by Coffield, because a base support presented by Brown is very solid and stable (which is very important aspect in mounting a satellite antenna, because the direction in which an antenna is pointing is critical for its reception). Further the base support has a cavity according to Brown, which allows locking pin to be inserted (Figure 4 elements 138 and 132), this feature is very useful especially when a user wants to remove a dish antenna with its supporting members in order to use the hitch for something else so in result it makes it easier for the user to use the hitch in multiple ways.

As to claim 7, Coffield, Wilson and Brown teach all the limitations presented in claim 6, Coffield teaches the vertical support member comprising first and second tubular members (Figure 1 elements 4 and 6), the first tubular member telescopically receiving the second tubular member (as seen from figure 1 and figure 2, element 6 can extend from element 4). Wilson teaches first tubular member having a plurality of cavities along the length thereof (Figure 1 elements 10 and 19), the second tubular member (Figure 1 element 11) having a single cavity designed to be selectively alignable with the plurality of cavities (Figure 1 element 13, since second support member 11, has a plurality of cavities, one can choose just one cavity to make it align with cavities in first member 10, since first member has a plurality of openings, the

height of the bar can be adjusted); and locking pin sized to be inserted through the tubular members via the aligned cavities (Figure 1 element 19).

As to claim 8, Coffield, Wilson and Brown teach all the limitations presented in claim 6, Wilson also teaches the trailer hitch receiver further comprising an elongated receiver tube having a hollow interior passage and walls of substantially uniform thickness (Figure 1 element 10, since 11 is contained in 10 when the bar is adjusted to the shorter height, element 10 has to hallow) and a cavity capable of receiving locking pin (Figure 1 element 19); and a means for coupling the trailer hitch receiver to a vehicle (Figure 1 element 18, as explained in justification for rejection of claim 6, Brown teaches a means for coupling the trailer hitch receiver to a vehicle, Figure 4 elements 132, 138 and 126).

## Allowable Subject Matter

Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: inner receiving areas form a plurality of substantially straight lines along the length of the pair of vertical support members.

#### The Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Application/Control Number: 10/751,139 Page 10

Art Unit: 2821

 US 6195066 discloses satellite dish mounting arm, similar structure of the bars (support members), however the height is not adjustable

- US 6175339 discloses retractable antenna clamp, the way of mounting it is different than the one proposed in the application

- US 4927117 discloses the attachment with the similar member structure as proposed in the application, it does not have a plurality of openings

 US 6557483 discloses vehicle trailer hitch display apparatus, where the attachment is connected to the trailer hitch.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Technology Center 2800

AL